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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,796

03/08/2004

Tzvi Avnery

2251.2005-004

3169

21005

7590

03/23/2005

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EXAMINER

FERNANDEZ, KALIMAH

ART UNIT

PAPER NUMBER

2881

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,796

Applicant(s)

AVNERY, TZVI

Examiner

Kalimah Fernandez

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-8-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-2,9-14, and 21-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 50-53 of U.S. Patent No. 6,702,984. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed invention is an obvious variant of the patented invention.

3. Present claim 1 recites all the limitations of patented claim 50 except for a propulsion system. It would have been obvious to provide a propulsion system for the robotic device because a robotic arm needs a propulsion

device to move the robotic arm over the surface as claimed in patented claim 50.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2,8,12,13-14, 20, and 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,229,607 issued to Matsui et al.

3. Matsui et al disclose an electron beam generator (1).

4. Matsui et al disclose a robotic device (227,228) for moving the beam of electrons over surface to irradiate selected regions of the surfaces, the robotic device includes a propulsion system (i.e. motor) for propelling/operating the robotic device (227,228) (see fig. 9; col.11, lines 45-66).

5. As per claims 2 and 14, Matsui et al disclose a robotic arm for maneuvering the electron beam generator (1) (see fig. 1).
6. As per claims 8 and 20, Matsui et al disclose the robotic device moves along a track (see fig. 5).
7. As per claims 12 and 24, Matsui et al disclose the surface irradiation to facilitate a chemical reaction wherein secondary electron are emitted from a sample (col.11, lines 60-66).
8. As per claim 13, Matsui et al disclose generating a beam of electrons with an electron beam generator (1), the beam of electrons exiting the electron beam generator (1) through an exit window/opening and moving the beam of electrons over the surfaces with a robotic device (227,228) to irradiate selected regions of the surfaces, the robotic device including a propulsion system (see fig.9; col.11, lines 45-66).
9. As per claim 25, Matsui et al disclose providing an electron beam generator (1) and arranging a robotic device (227,228) relative to the electron beam generator (1).
10. Claims 1-3,8,12,15, and 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 4,760,567 issued to Crewe.
11. Crewe discloses an electron beam generator (18,19,20).

12. Crewe discloses a robotic device (21,22,23) for moving the beam of electrons over surface to irradiate selected regions of the surfaces; the robotic device includes a propulsion system (28,29,30) (see col.8, lines 7-19; col.14, lines 6-11).

13. As per claim 2, Crewe discloses the robotic arm for maneuvering the electron beam generator (see fig. 1).

14. As per claims 3 and 15, Crewe discloses the robotic device includes a horizontal rotary joint for swinging the robotic arm (se fig. 1).

15. As per claims 8 and 20, Crewe discloses the robotic device moves along a track (see fig. 1).

16. As per claims 12 and 24, Crewe discloses surface irradiation for destroying molecules and facilitating chemical reactions (col.9, lines 13-19).

17. As per claim 25, Crewe discloses the claimed invention as discussed above.

Claim Rejections - 35 USC § 103

18. Claims 4-6 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crewe as applied to claim 1 above, and further in view of US Pat No 4,684,088 issued to Heller.

19. Crewe discloses the claimed invention except for the recited arm of claim 4 and 16 and wheels as in claims 5-6 and 17-19.

20. However, Heller teaches a robotic arm having an upper arm (20); a rotary shoulder; a lower arm; a bracket; and a rotary bracket joint attached to microscope (col.3, lines 20-54; fig. 4). Heller also teaches wheels (b2, b3).

21. It would have been obvious to an ordinary artisan at the time of the invention to incorporate a robotic arm as described Heller because the recited limitation are generic robotic arm and associated technology within the level of ordinary skill and because Heller teach improved mobility (col.5, lines 4-18) and reduced size (col. 1, line 24-49).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat No 5,744,811 issued to Schonberg et al and US Pat No 4,074,313 issued to Reisner et al are considered relevant to the claimed invention. Any inquiry concerning this communication or earlier communications from the examiner should be

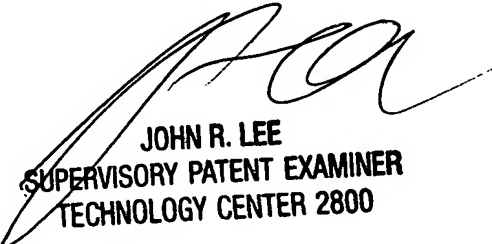
directed to Kalimah Fernandez whose telephone number is 571-272-2470.

The examiner can normally be reached on Mon-Tues 6:30-3:30; Wed-Thurs 8-5 and Fri.9am-6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KF


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800